FIG. 1

F I G. 2

FIG. 3A

FIG. 3B

(SECTIONAL VIEW TAKEN ALONG LINE A-A)

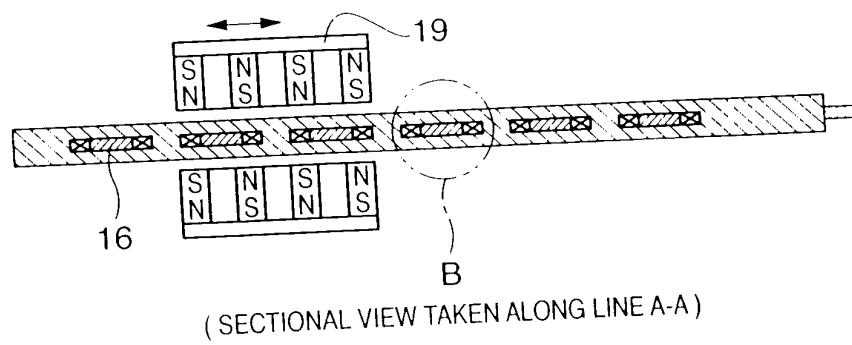# FIG. 4

16c

16b

16a

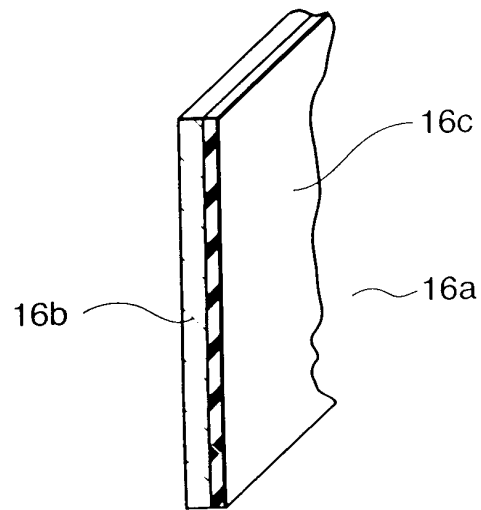# FIG. 5

ENLARGED VIEW OF PORTION B

C 16

FIG. 6

ENLARGED VIEW OF PORTION C
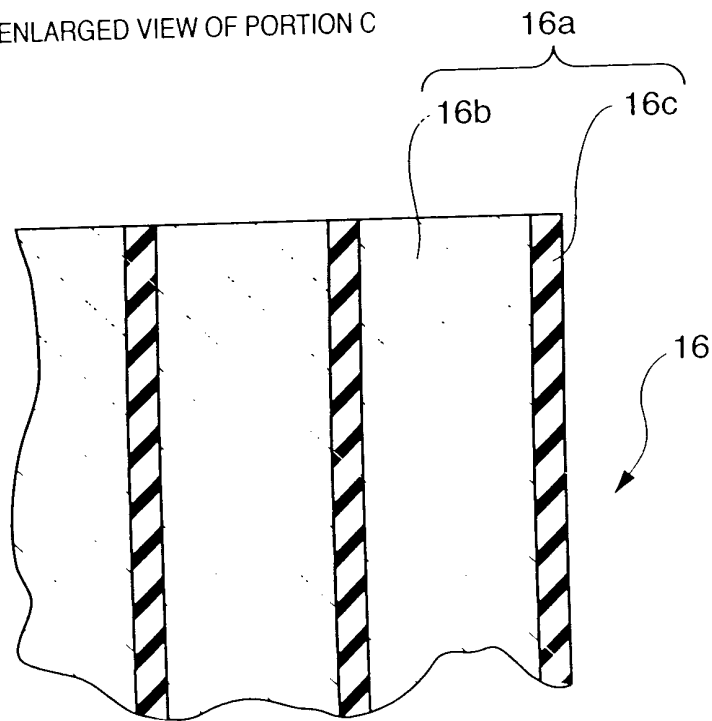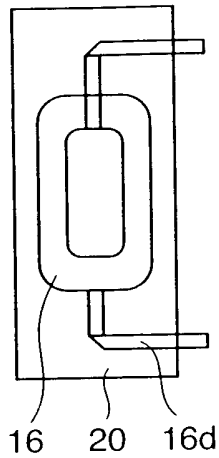
F I G. 7A
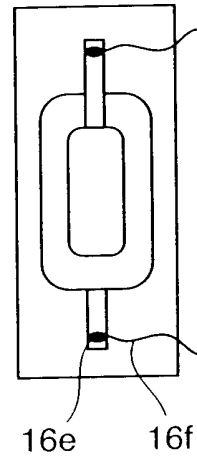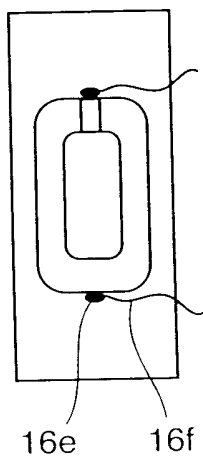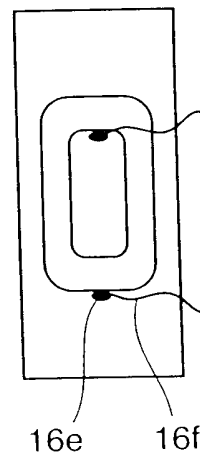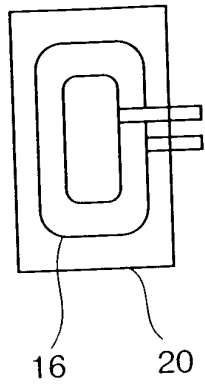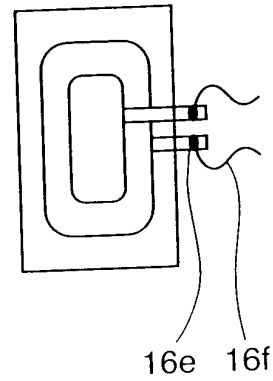
16　20　16d

F I G. 7B

16e　16f

F I G. 7C

16e　16f

F I G. 7D

16e　16f

FIG. 8A

16   20

FIG. 8B

16e   16f

FIG. 8C

16e   16f

FIG. 8D

16e   16f

F I G. 9A

16h　16i　16g

D ——————————— D

16　16f　16e

F I G. 9B

16i　16h　16g

16f　16e

F I G. 9C

16

16g　16g

16g

F I G. 10A

16j 16j 16

16g 16g 16g

F I G. 10B

16j 16j 16

F I G. 10C

16k 16k 16

16k 16k

16g 16g 16g

F I G. 11A

E

16

F I G. 11B

16
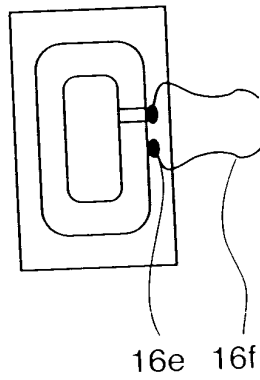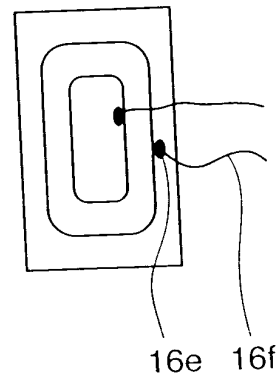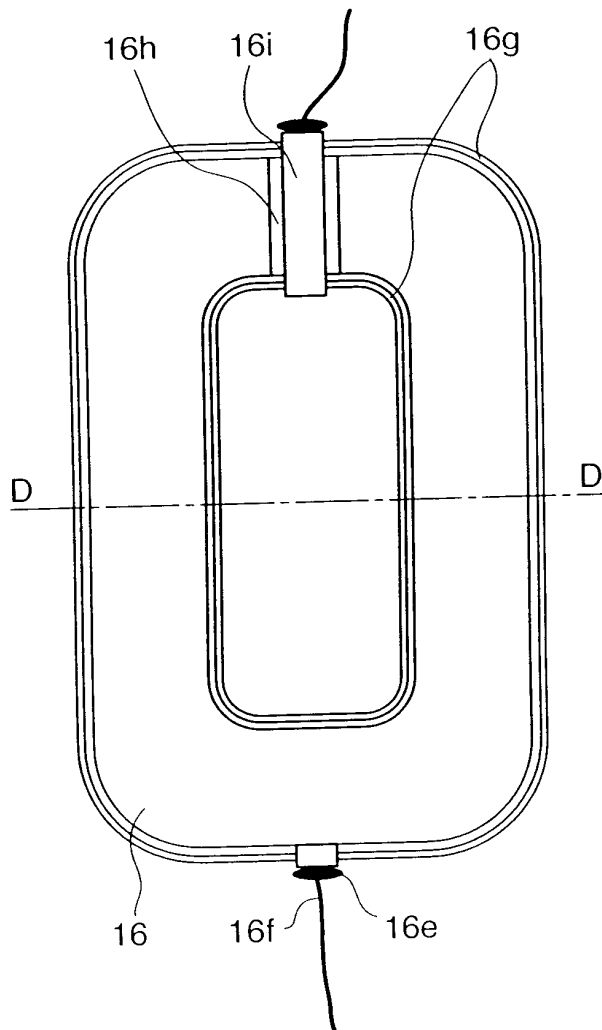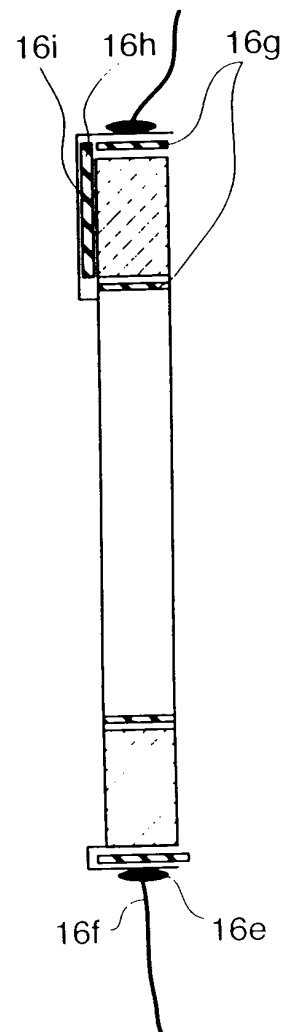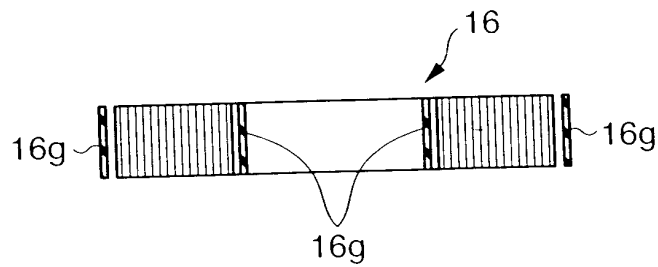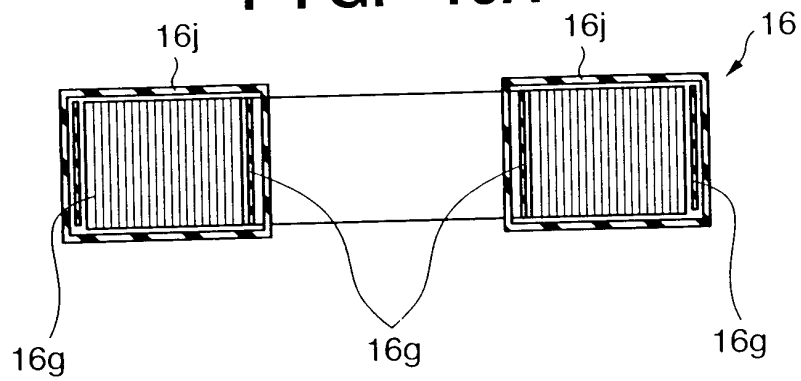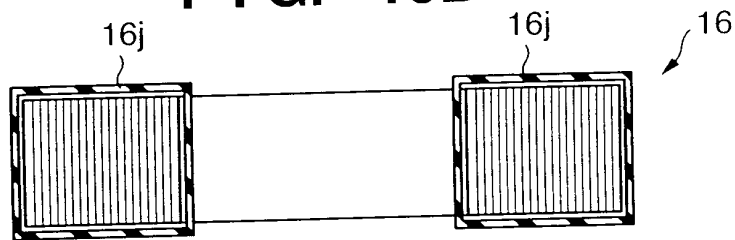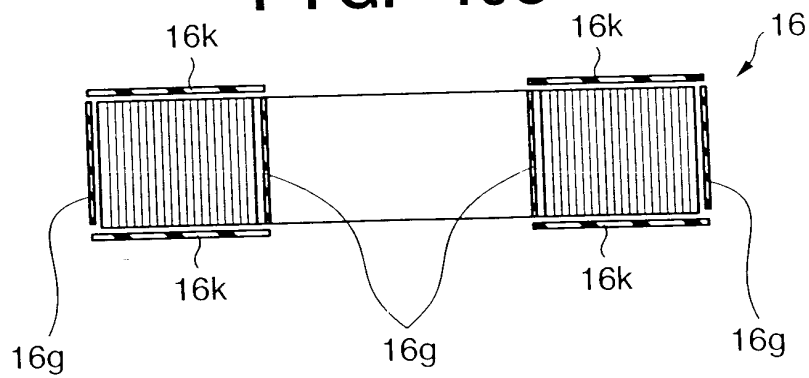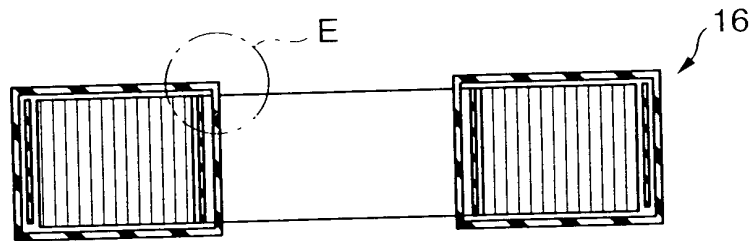
ENLARGED VIEW OF PORTION E

16j

16m

16b

16c

16g

FIG. 12A

F

16
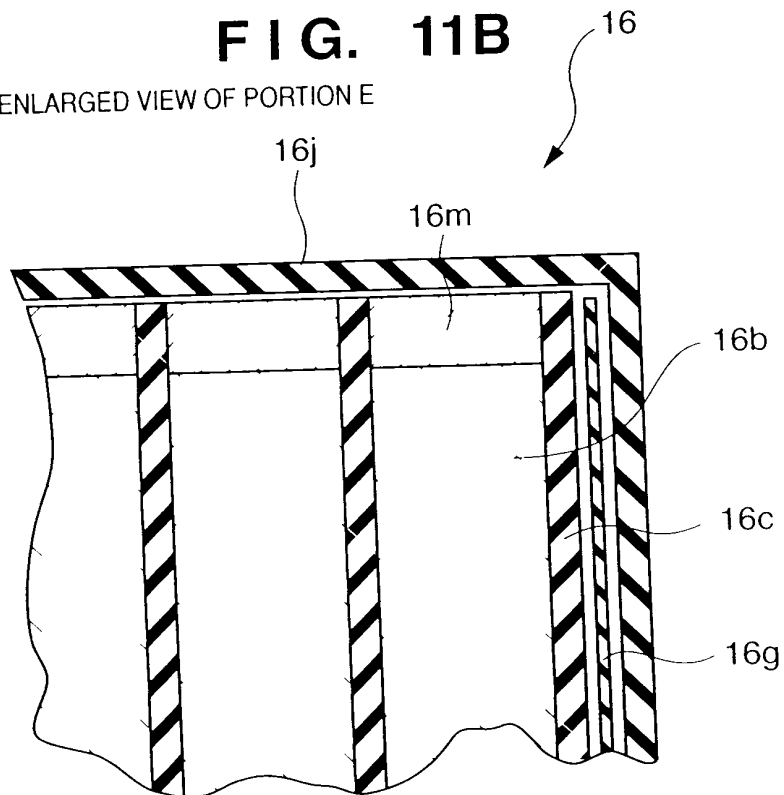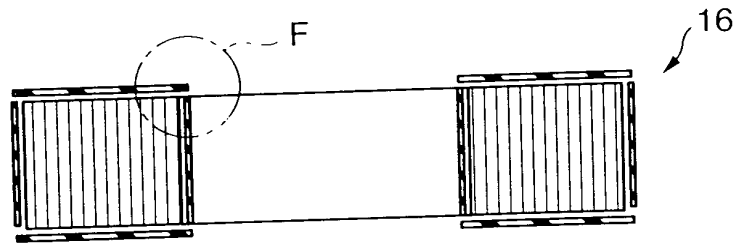
FIG. 12B

ENLARGED VIEW OF PORTION F

16

16k

16m

16b

16c

16g

FIG. 13A

16p

16n

FIG. 13B

16q

16r

16p   16n

INNER CIRCUMFERENTIAL
SURFACE α WINDING

FIG. 13C

16q

16s

16p   16n

INNER CIRCUMFERENTIAL
SURFACE BENDING / SHIFT WINDING

FIG. 14

FIG. 15A

20 (24, 26)

20a

16

FIG. 15B

| S N | | N S | 20a |

16

| S N | | N S |

F I G. 16A

16c

16t

16a

F I G. 16B

16c

16b

16a

FIG. 17
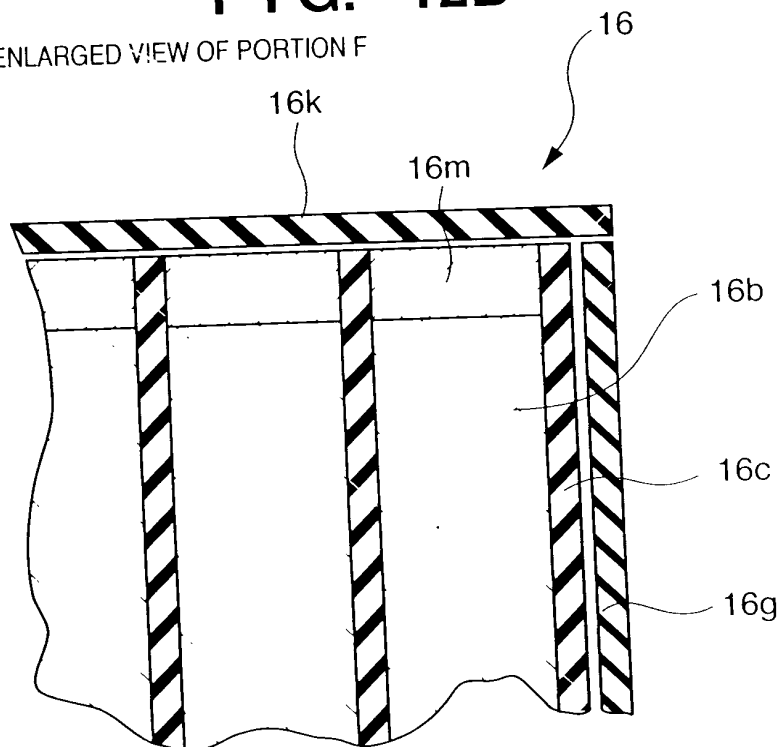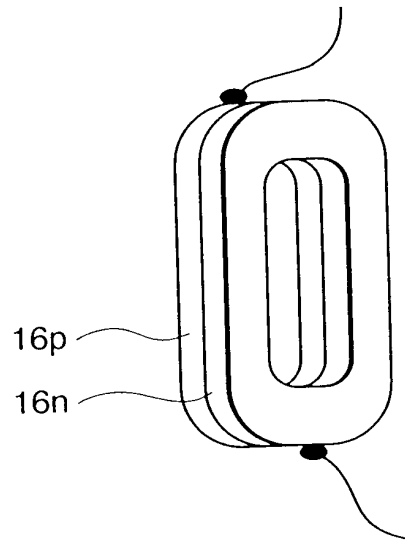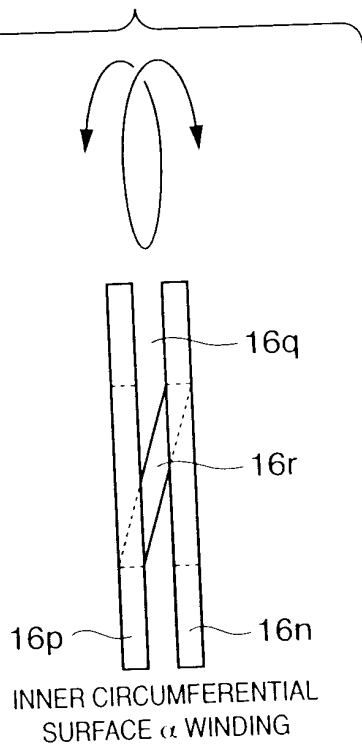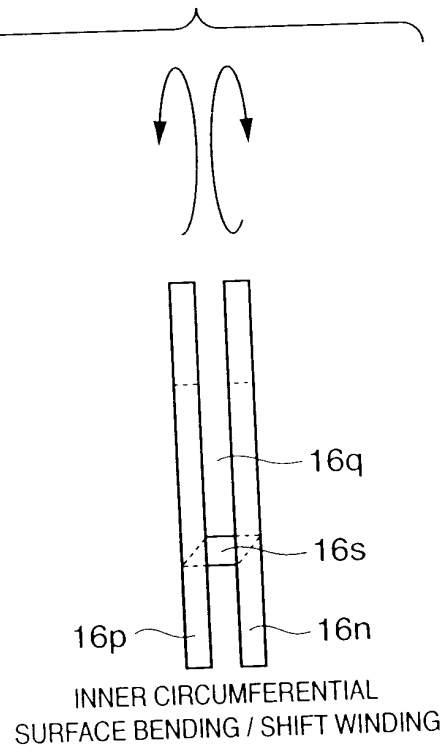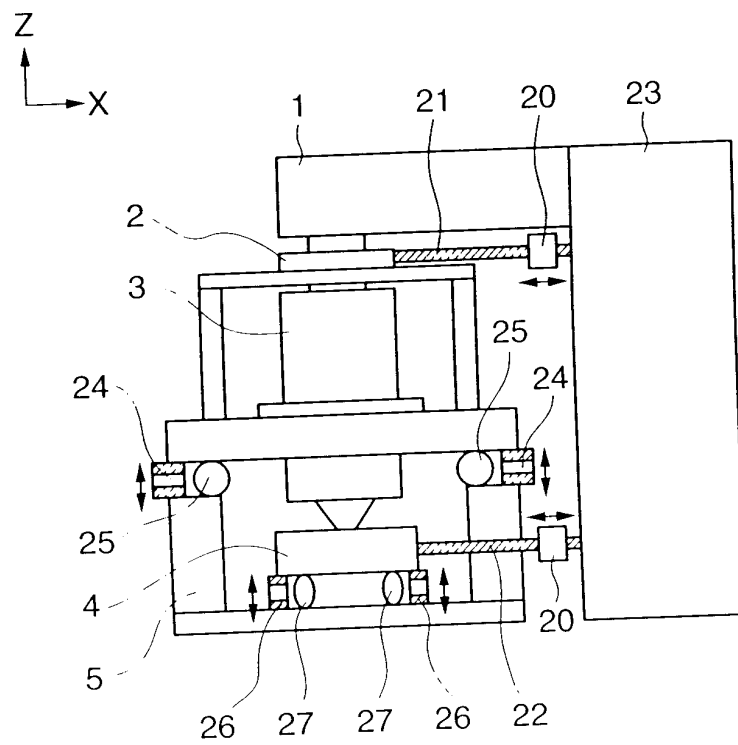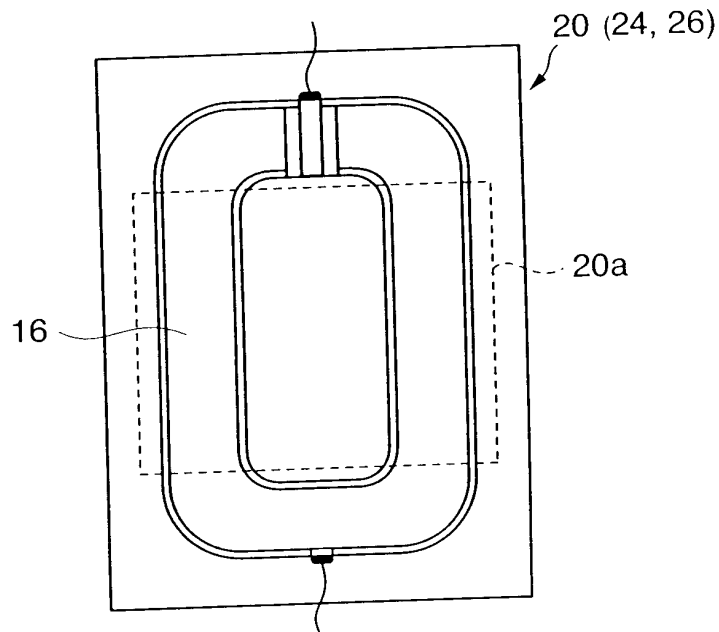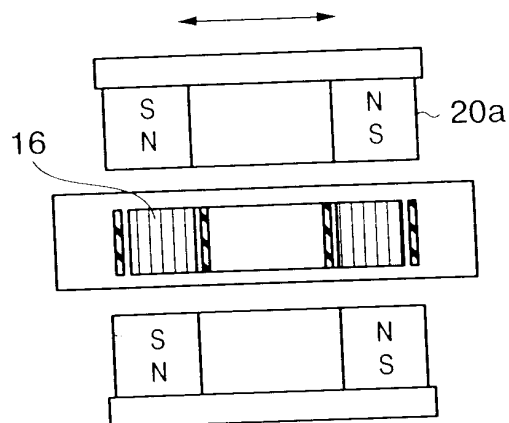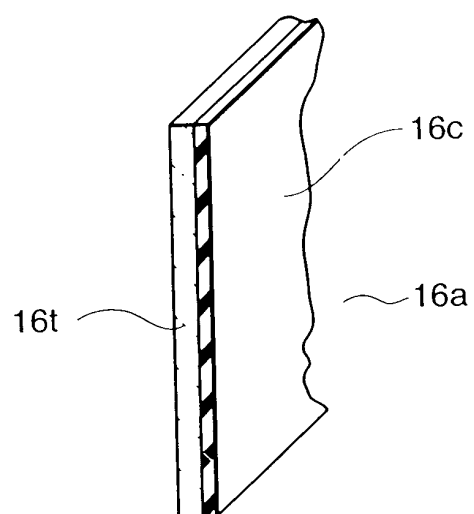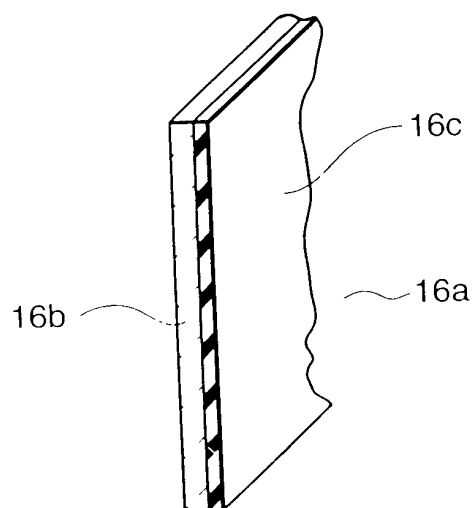
```
┌──────────────────┐                    ┌──────────────────┐
│  DESIGN CIRCUIT  │── STEP1            │   FORM WAFER     │── STEP3
└──────────────────┘                    └──────────────────┘
         │                                       │
         ▼                                       │
┌──────────────────┐                             │
│    FORM MASK     │── STEP2                      │
└──────────────────┘                             │
         │                                       │
         └───────────────────┬───────────────────┘
                             ▼
                   ┌──────────────────┐
                   │  WAFER PROCESS   │── STEP4
                   │  (PRE-PROCESS)   │
                   └──────────────────┘
                             │
                             ▼
                   ┌──────────────────┐
                   │    ASSEMBLY      │── STEP5
                   │  (POST-PROCESS)  │
                   └──────────────────┘
                             │
                             ▼
                   ┌──────────────────┐
                   │    INSPECTION    │── STEP6
                   └──────────────────┘
                             │
                             ▼
                   ┌──────────────────┐
                   │    SHIPPING      │── STEP7
                   └──────────────────┘
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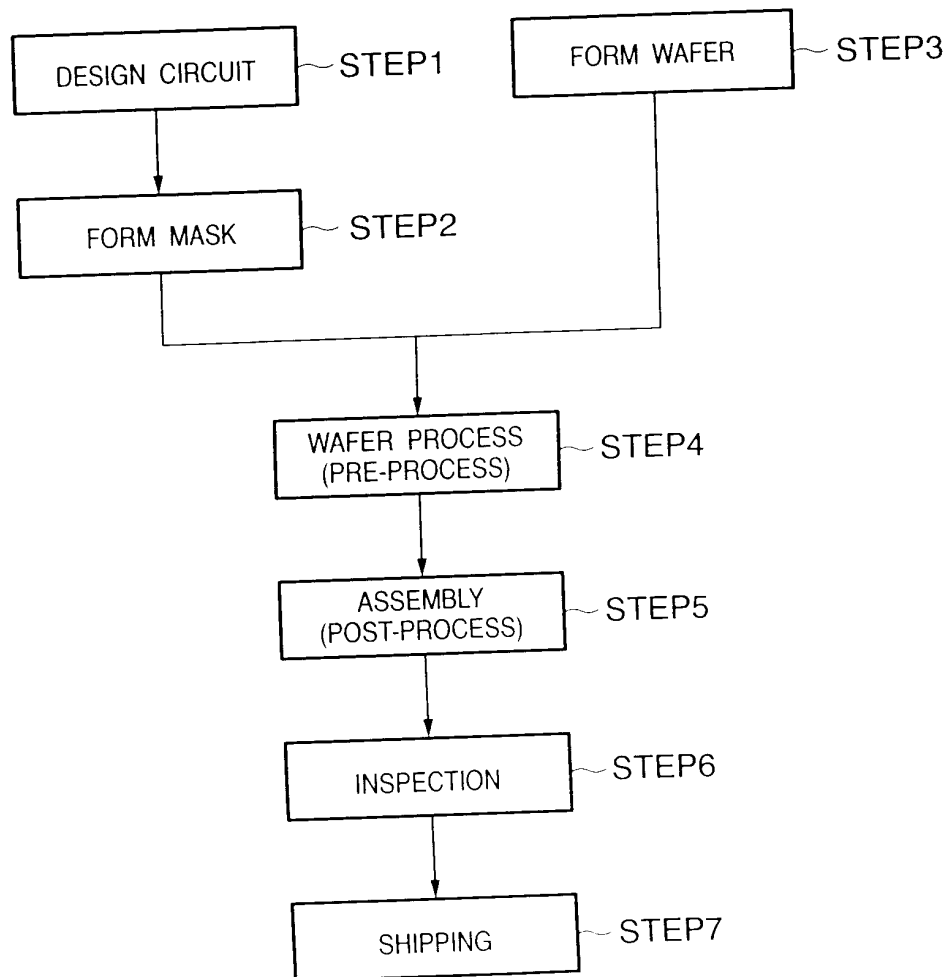
SEMICONDUCTOR DEVICE MANUFACTURING FLOW

FIG. 18

STEP11

OXIDATION

STEP12

CVD

STEP13

FORM ELECTRODE

STEP14

IMPLANT ION

STEP15

RESIST PROCESSING

STEP16

EXPOSURE

STEP17

DEVELOPING

STEP18

ETCHING

STEP19

REMOVE RESIST

REPEAT

WAFER PROCESS

F I G. 19A

y
x

109

G   G

116

118

F I G. 19B

119

S	N	S	N
N	S	N	S

S	N	S	N
N	S	N	S

116

H
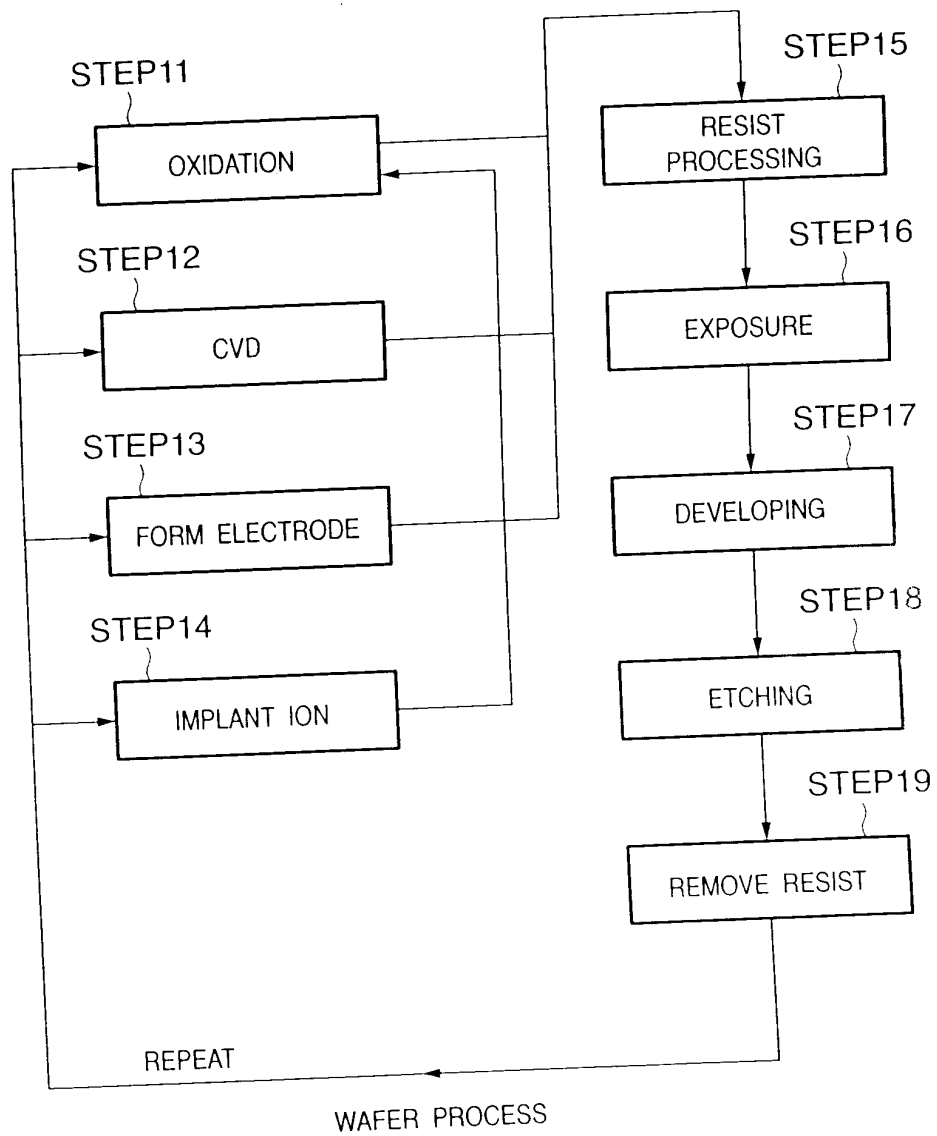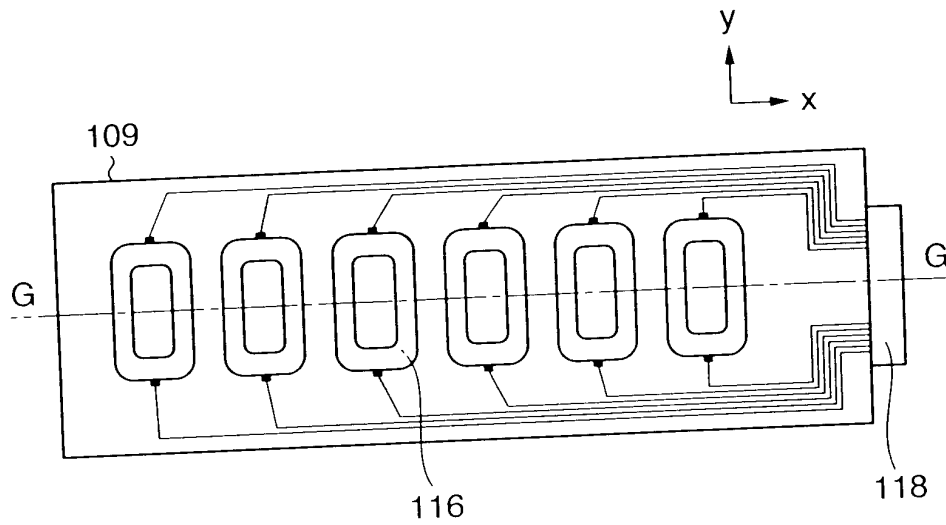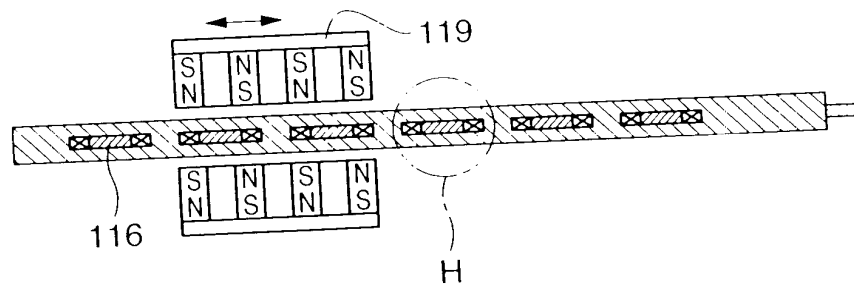
(SECTIONAL VIEW TAKEN ALONG LINE G-G)
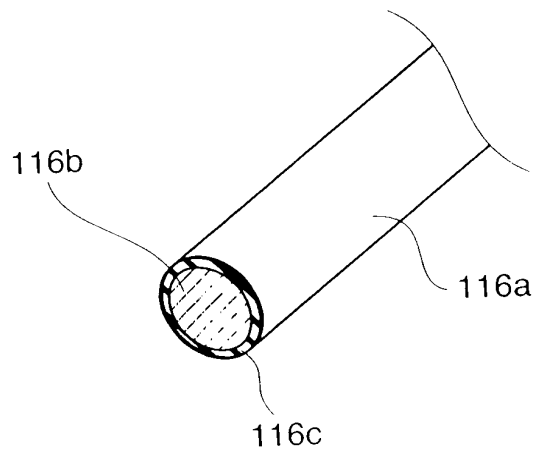
F I G. 20

116b

116a

116c

FIG. 21

ENLARGED VIEW OF PORTION H

I

116
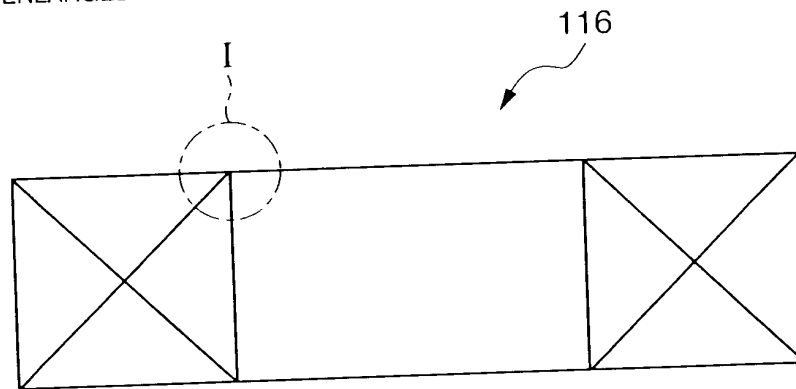
FIG. 22
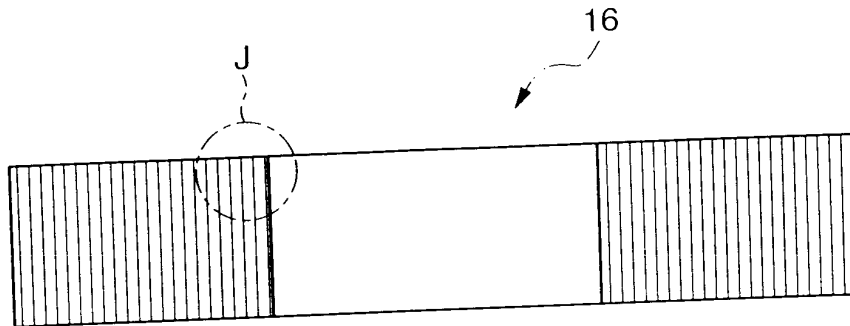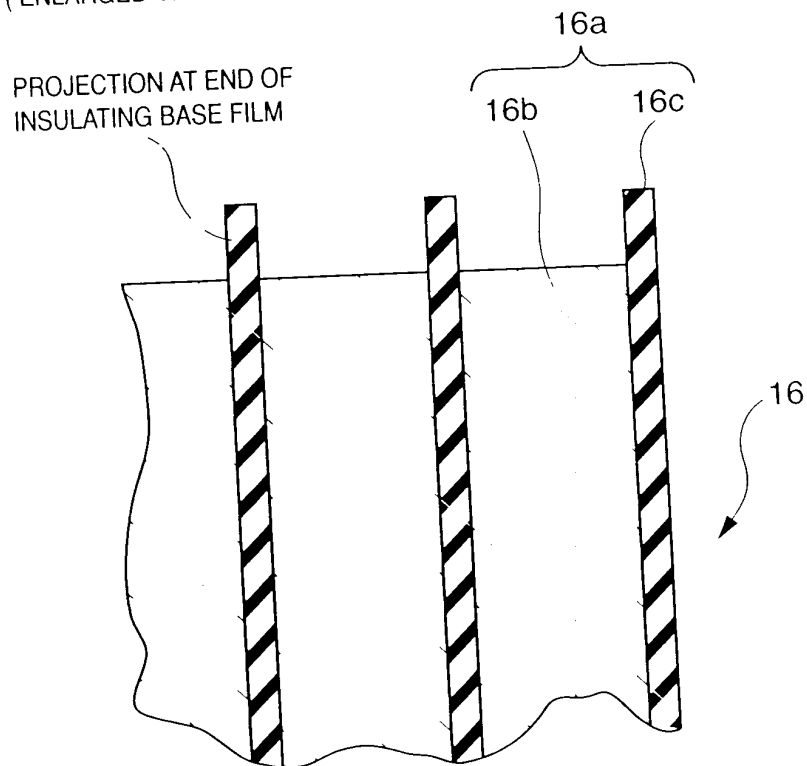
ENLARGED VIEW OF PORTION I

F I G. 23A

J

16
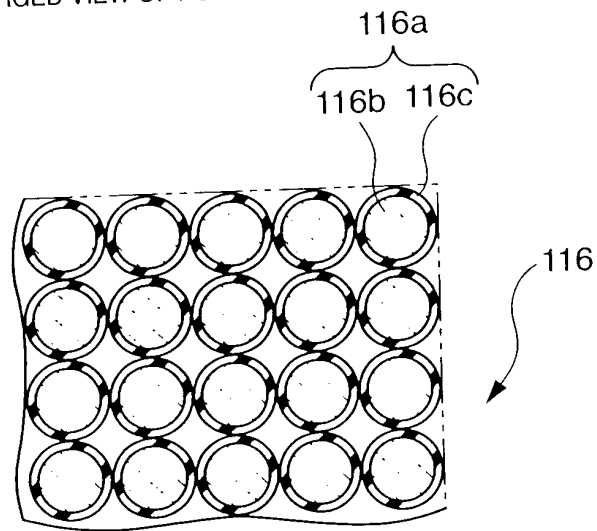
F I G. 23B

(ENLARGED VIEW OF PORTION J)

16a

PROJECTION AT END OF
INSULATING BASE FILM

16b   16c

16

F I G. 24A

PROJETION
AT END OF
INSULATING
BASE FILM

16b 16c

16a

28

F I G. 24B

29b   29c

PROJETION
AT END OF
INSULATING
BASE FILM

29a

16b   16c

F I G. 24C

29d

PROJETION
AT END OF
INSULATING
BASE FILM

16b

16c

F I G. 24D

29e

PROJETION
AT END OF
INSULATING
BASE FILM

16b   16c
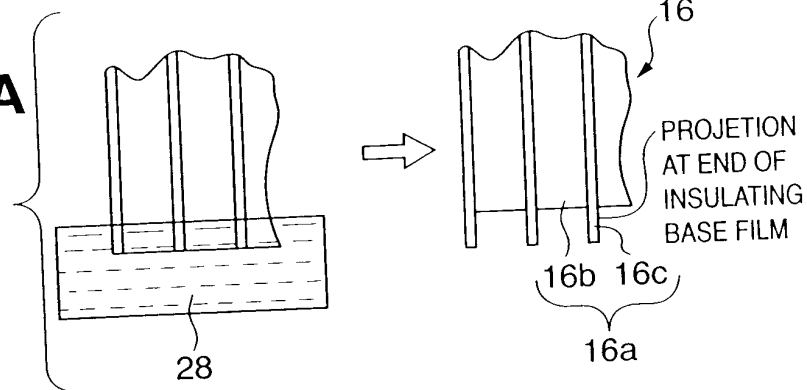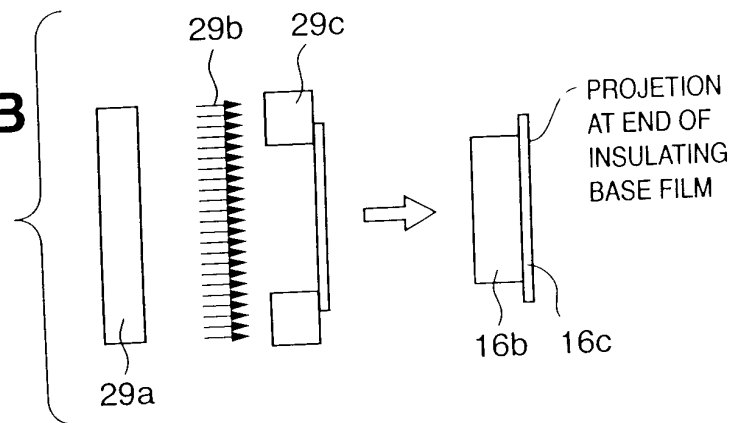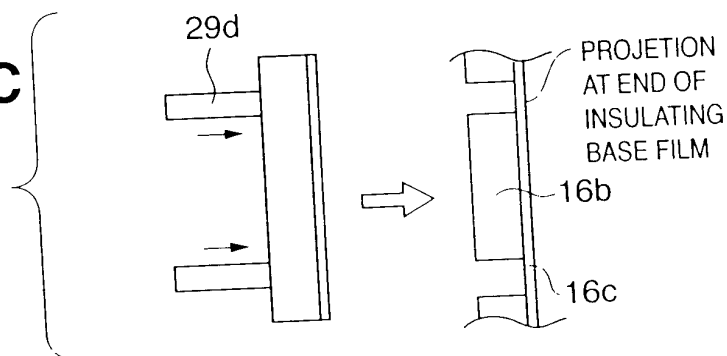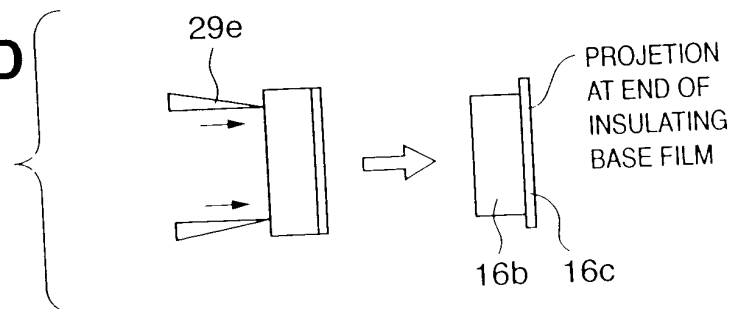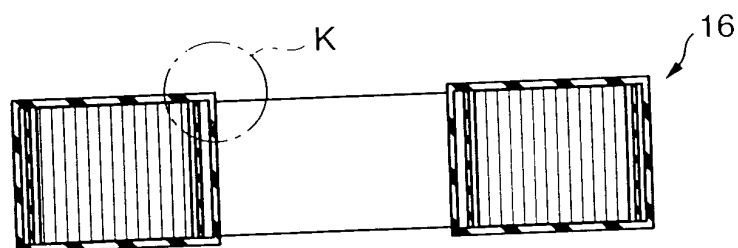
F I G. 25A

F I G. 25B

(ENLARGED VIEW OF PORTION K)

PROJETION AT END OF
INSULATING BASE FILM
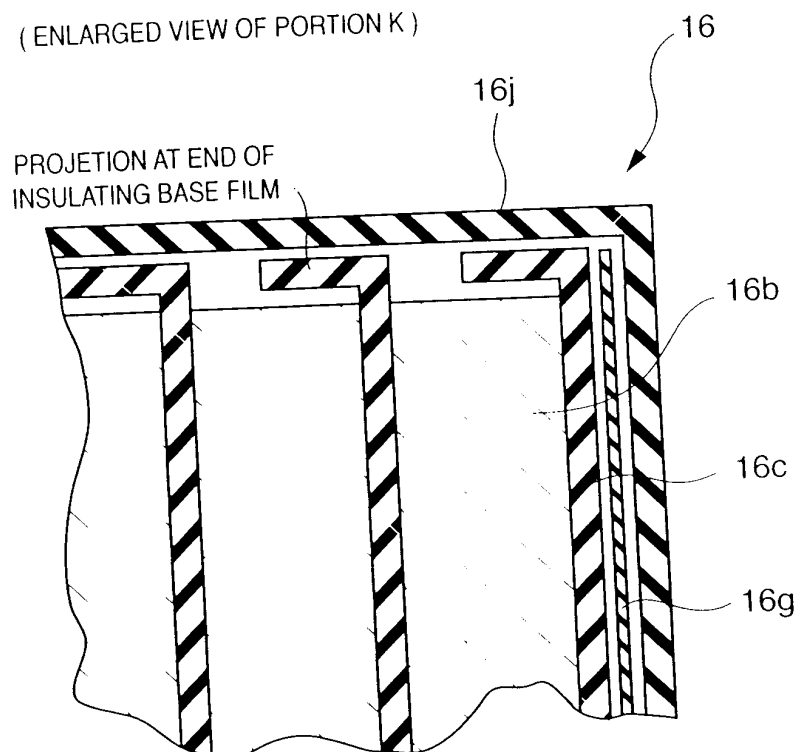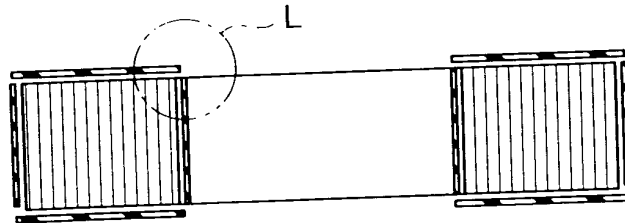
F I G. 26A

F I G. 26B

(ENLARGED VIEW OF PORTION L)
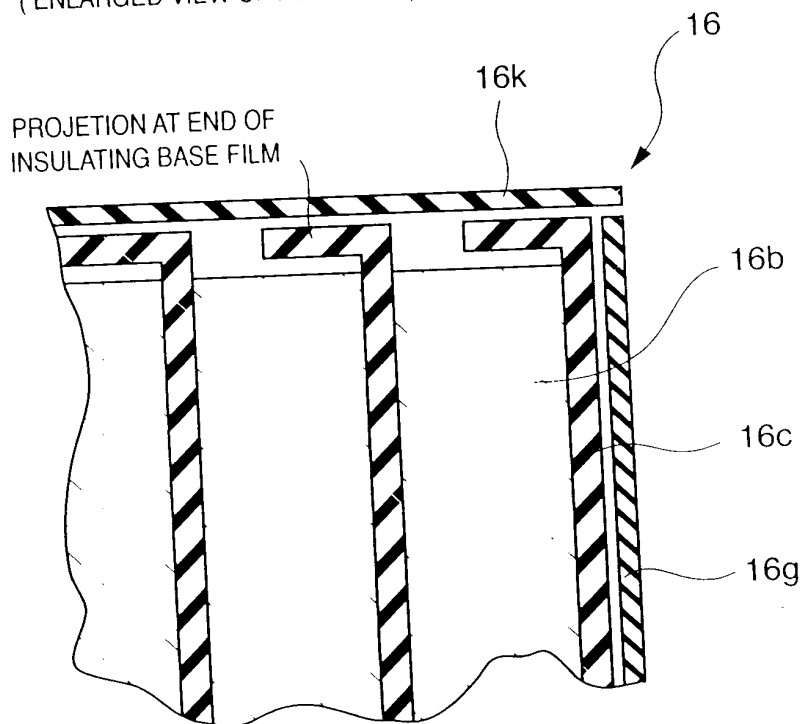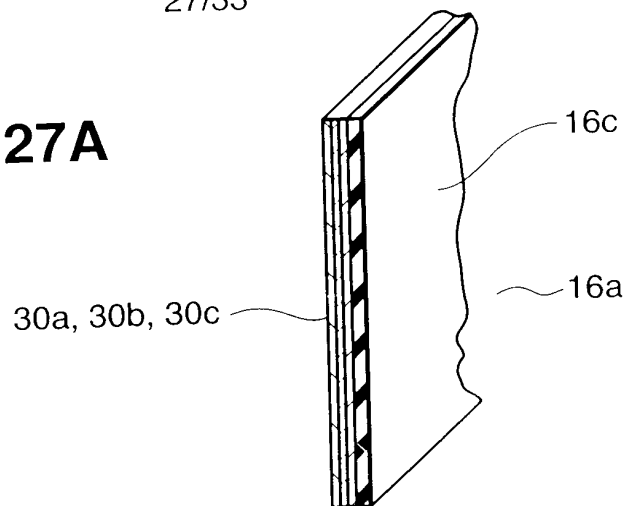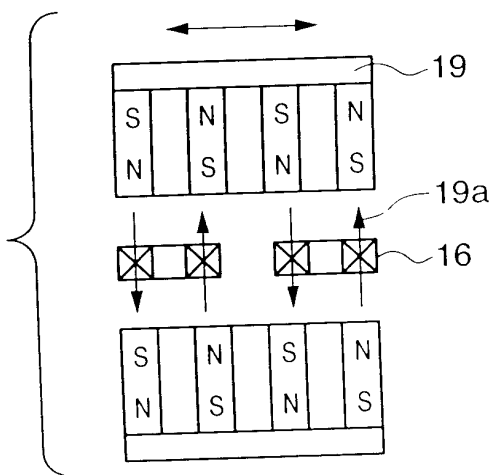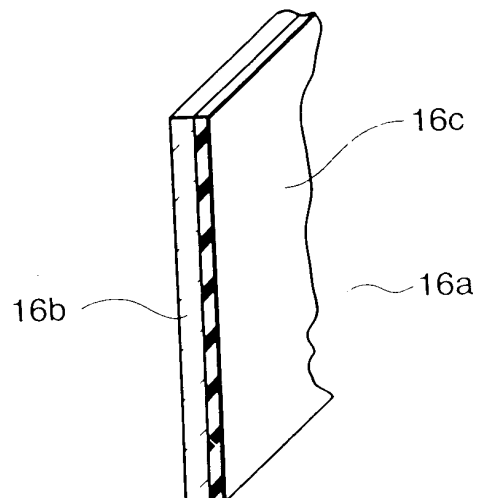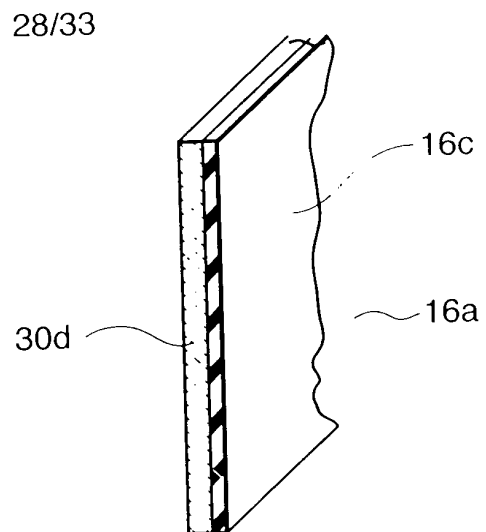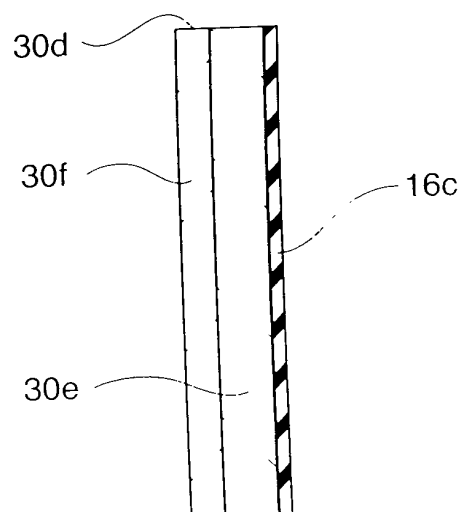
16

16k

PROJETION AT END OF
INSULATING BASE FILM

16b

16c

16g

FIG. 27A

16c

16a

30a, 30b, 30c

FIG. 27B

19

| S | N | | S | N |
| N | S | | N | S |

19a

16

| S | N | | S | N |
| N | S | | N | S |

FIG. 27C

16c

16a

16b

F I G. 28A

16c

30d

16a

F I G. 28B

30d

30f

16c

30e

F I G. 28C

PROJETION
AT END OF
INSULATING
BASE FILM

30d

16c

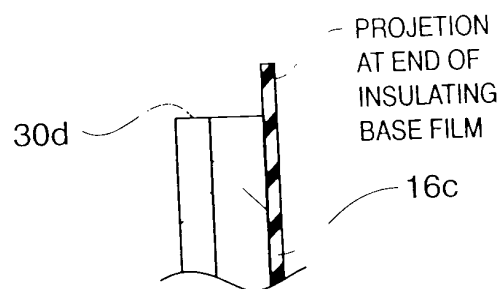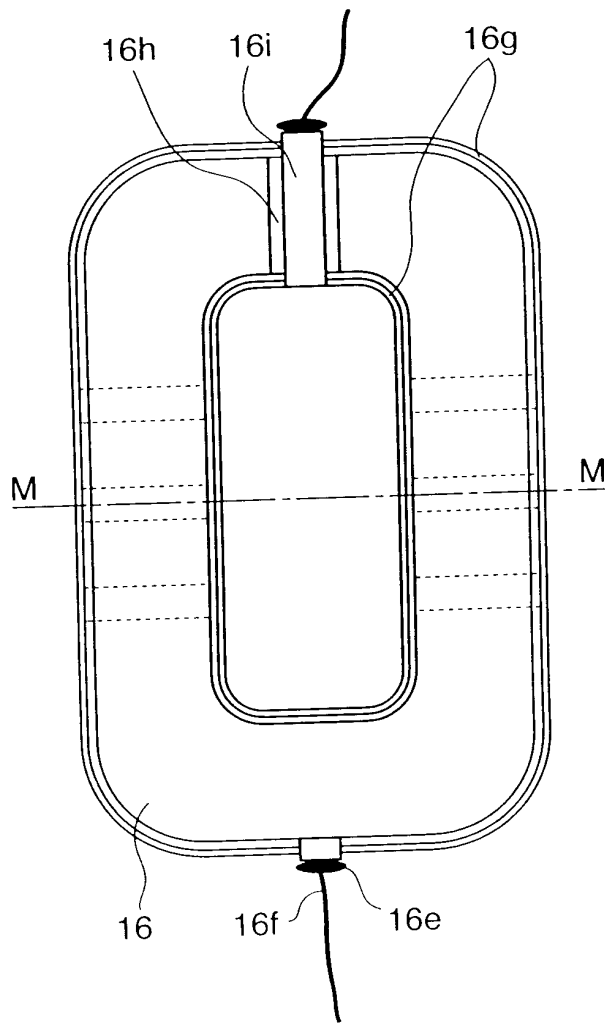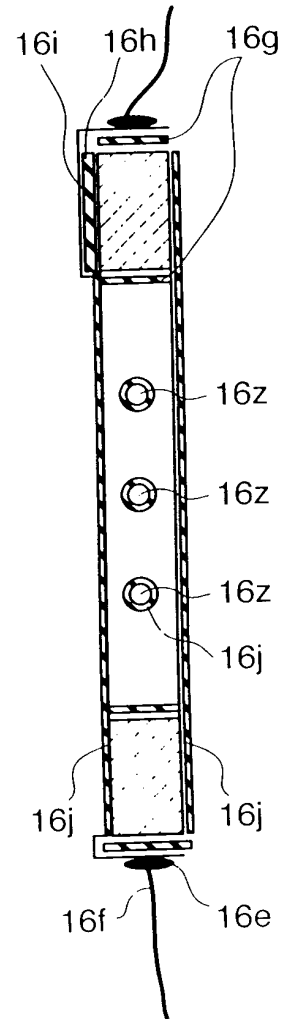# FIG. 29A

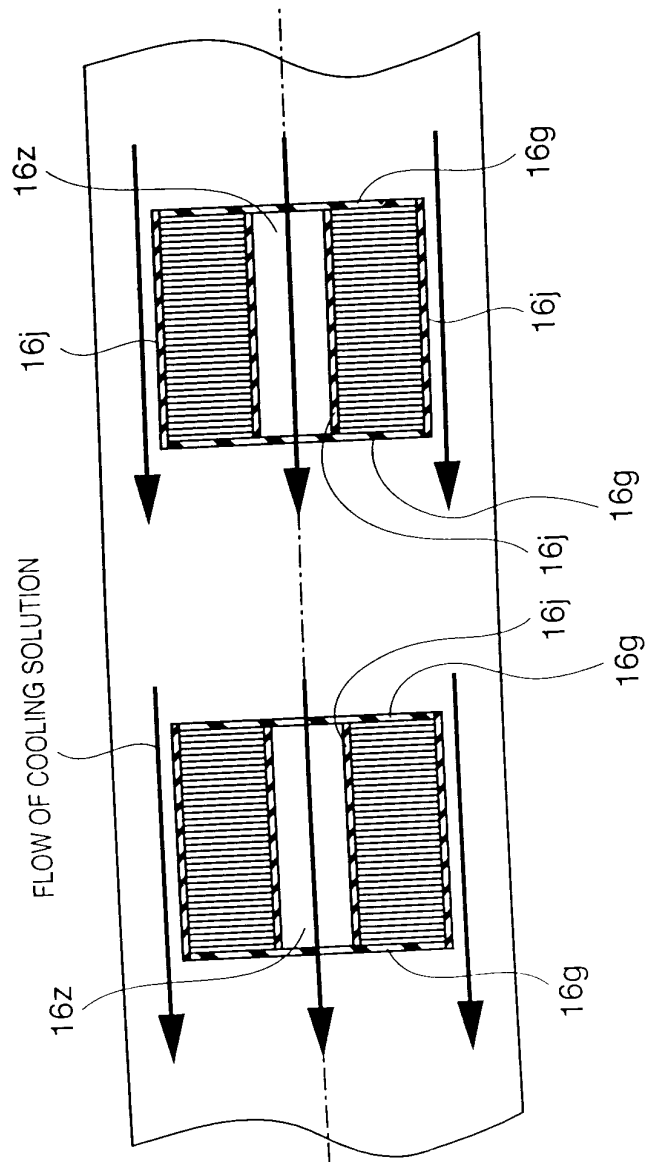# FIG. 29B

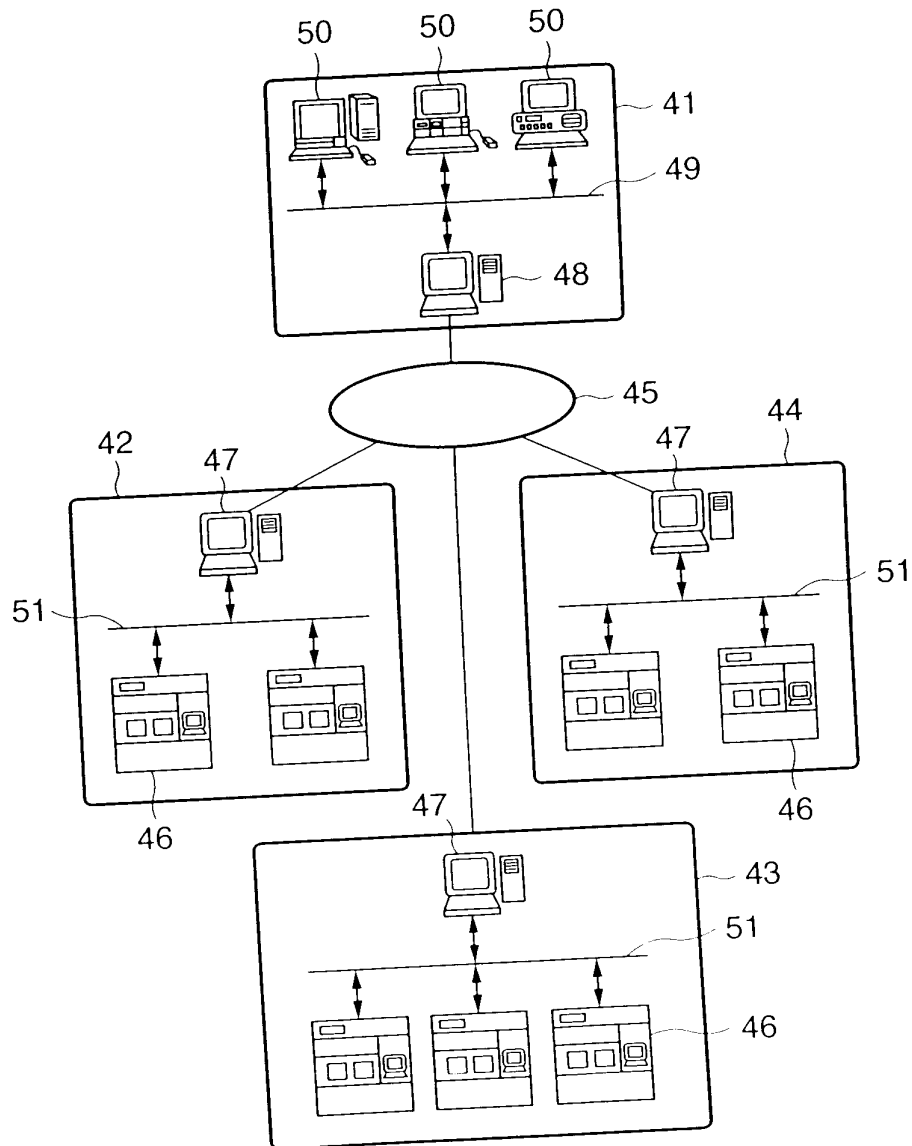(SECTIONAL VIEW TAKEN ALONG LINE M-M)

FIG. 29C

FIG. 30

FLOW OF COOLING SOLUTION

16z

16j

16g

16j

16g

16j 16j

16g

16j 16j

16g

16z

16g
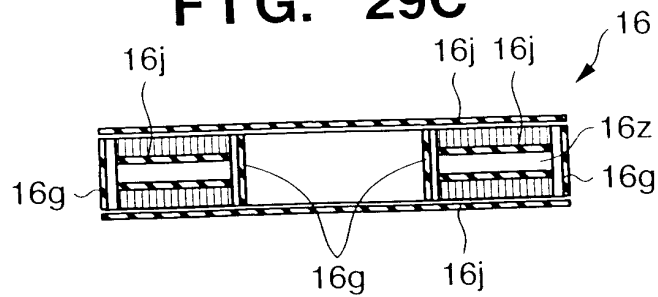
F I G. 31

F I G. 32

FIG. 33
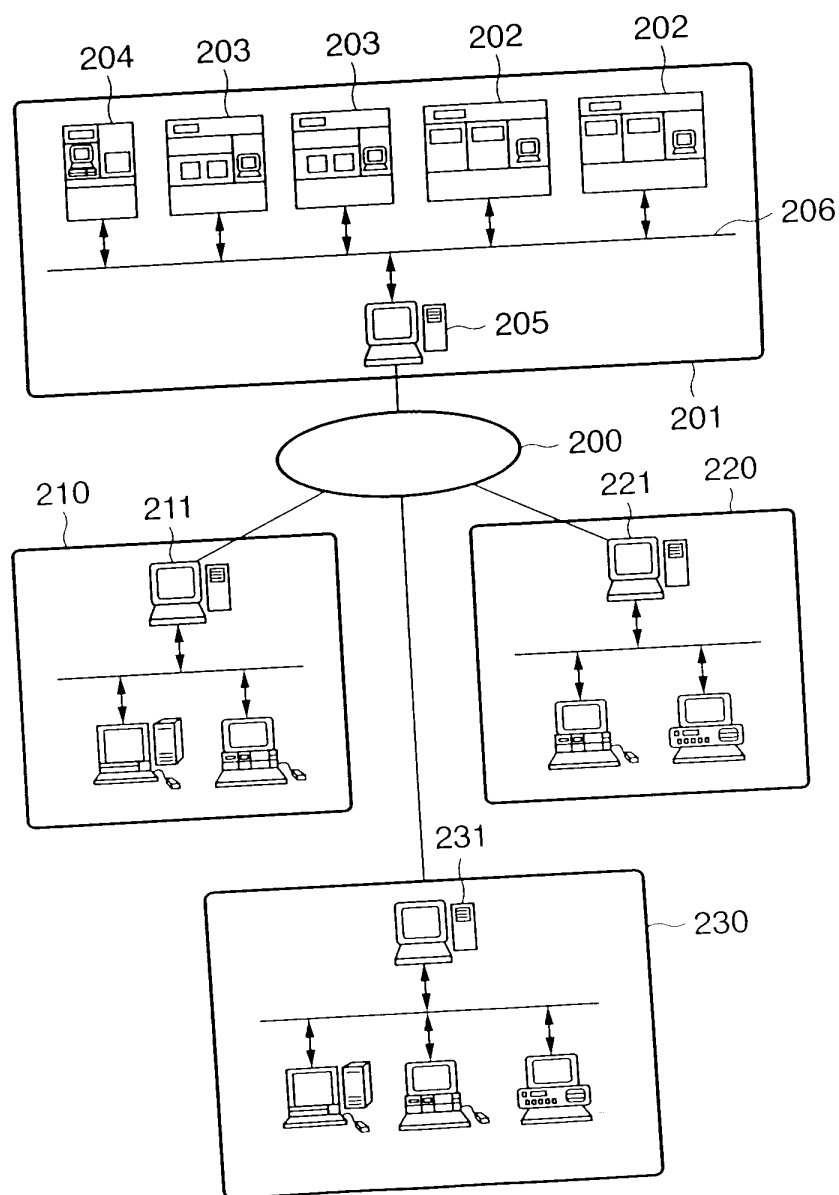
URL http://www.maintain.co.jp/db/input.html

TROUBLE DB INPUT WINDOW

OCCURRENCE DATE 2000/3/15 ~ 404
TYPE OF APPARATUS * * * * * * * * * ~ 401
OBJECT OPERATION ERROR (START-UP ERROR) ~ 403
DEVICE S/N 465NS4580001 ~ 402
DEGREE OF URGENCY D ~ 405

SYMPTOM LED KEEPS FLICKERING AFTER POWER ON ~ 406

REMEDY POWER ON AGAIN (PRESS RED BUTTON IN ACTIVATION) ~ 407

PROGRESS INTERIM HAS BEEN DONE ~ 408

SEND RESET   410   411   412

LINK TO RESULT LIST DATABASE   SOFTWARE LIBRARY   OPERATION GUIDE